

T7-3 (2b)

Nech $f \in C\langle a, b \rangle$, $\varphi' \in C\langle \alpha, \beta \rangle$, kde $\varphi : \langle \alpha, \beta \rangle \rightarrow \langle a, b \rangle$. Nech $\varphi(\alpha) = a, \varphi(\beta) = b$. Potom platí:

$$\text{a) } \int_a^b f(x) dx = \int_{\varphi(\alpha)}^{\varphi(\beta)} f[\varphi(t)] \varphi'(t) dt,$$

$$\text{c) } \int_a^b f(x) dx = \int_{\alpha}^{\beta} f[\varphi(x)] \varphi'(x) dx,$$

$$\text{b) } \int_a^b f(x) dx = \int_{\alpha}^{\beta} f[\varphi(t)] \varphi'(t) dt,$$

$$\text{d) } \int_a^b f(x) dx = \int_{\alpha}^{\beta} f[\varphi(t)] \varphi'(t) dt.$$